

WHAT IS CLAIMED IS:

1. A fuel cell electrocatalyst comprising:
 - a carrier; and
 - a catalyst layer made of a Pt-Ru alloy supported on the carrier, and

5 having an oxygen content of 4.4 wt% or less.

 2. A fuel cell electrocatalyst comprising:
 - a carrier; and
 - a catalyst layer made of a Pt-Ru alloy supported on the carrier, in which a value of the amount of oxygen that exists in one layer of an outermost surface

10 of a component atom is 14.1% or less.

 3. A method of producing a fuel cell electrocatalyst comprising:
 - a supporting step of supporting a catalyst layer made of an alloy including Pt and Ru on a carrier; and
 - an oxygen content regulating step of regulating an oxygen content of

15 the catalyst layer.

 4. The method of producing a fuel cell electrocatalyst according to claim 3, wherein:
the oxygen content regulating step is a step of regulating the oxygen content to 4.4 wt% or less with reference to the catalyst layer.

20 5. The method of producing a fuel cell electrocatalyst according to claim 3, wherein:
the oxygen content regulating step is a step of eliminating oxygen from the catalyst layer.

25 6. The method of producing a fuel cell electrocatalyst according to claim 3, wherein:
the supporting step includes a heating step of heating the catalyst layer, and the oxygen content regulating step is a step of keeping the catalyst layer in a non-oxidizing atmospheric state in the heating step.

30 7. The method of producing a fuel cell electrocatalyst according to claim 6, wherein:
the non-oxidizing atmospheric state in the oxygen content regulating step is a state in which a non-oxidizing substance is adsorbed on a surface of the catalyst layer.

8. The method of producing a fuel cell electrocatalyst according to claim 6, wherein:

the non-oxidizing atmospheric state is a reducing atmospheric state.